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WILSON SONSINI GOODRICH & ROSATI
650 PAGE MILL ROAD
PALO ALTO, CA 94304-1050

EXAMINER

RUTTEN, JAMES D

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2192

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/848,952

Applicant(s)

LURIE ET AL.

Examiner

J. Derek Rutten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14, 16-24, 26, 28, 30-35 and 37-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-14, 16-24, 26, 28, 30-35 and 37-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. This action is in response to Applicant's submission filed 2/5/07, responding to the 8/3/06 Office action which detailed the rejection of claims 1-53. Claims 2-9, 16, 18-22, 26, 28, 30-35, 37-45, and 53 have been amended, claims 1, 15, 25, 27, 29, and 36 have been canceled, and new claims 54-60 have been added. Claims 2-14, 16-24, 26, 28, 30-35, and 37-60 remain pending in the application and have been fully considered by the examiner.

Response to Arguments/Amendments

2. Applicants' amendment has corrected the objection to the claims. Therefore, the objection is withdrawn.

3. Applicants' amendment of claim 43 has obviated the prior rejection of the claim under 35 U.S.C. 112, first paragraph. Therefore, the rejection is withdrawn.

4. At the top of page 17, filed 2/5/07, Applicants essentially suggest that the claims have not been considered "as a whole," but rather have been viewed using impermissible hindsight. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

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5. Applicant's arguments, see especially section "D" on page 24, filed 2/5/07, with respect to the rejections of claims 1-53 under 35 U.S.C. 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new grounds of rejection is made in view U.S. Patent 6,636,873 to Carini et al..

Specification

6. The incorporation of essential material in the specification by reference to an unpublished U.S. application, foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference, if the material is relied upon to overcome any objection, rejection, or other requirement imposed by the Office. The amendment must be accompanied by a statement executed by the applicant, or a practitioner representing the applicant, stating that the material being inserted is the material previously incorporated by reference and that the amendment contains no new matter. 37 CFR 1.57(f).

It is noted that a portion of the amendments filed 2/5/07 that do not find support in the originally filed specification but instead appear to draw support from the prior filed unpublished provisional application 60/202,351 from which the instant application draws priority. Support for new claim limitations should be added to the specification as suggested by MPEP 2163.07(b). Care should be taken not to introduce new matter.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no reference to "parameters" as mentioned in claim 43. Also,

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there is no reference to an interface “library” or “libraries” as mentioned in claims 39, 53, 54, 57, and 58. Also, there is no reference to “element tags” as mentioned in claim 59. Also, there is no reference to a “stand-alone,” “platform independent,” or “dedicated” data model data file, as mentioned in claims 40, 53, 54, and 60, respectively. Further, there is no mention of any “transaction log,” or “state field” as required by claim 60. Finally, no description was found regarding the process of matching a transaction log with a data model as mentioned in the last clause of claim 60.

Drawings

8. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “parameters” as mentioned in claim 43, the interface “library” or “libraries” as mentioned in claims 39, 53, 54, 57, and 58, the “element tags” as mentioned in claim 59, the “stand-alone,” “platform independent,” or “dedicated” data model data file, as mentioned in claims 40, 53, 54, and 60, respectively, the “transaction log,” or “state field” as required by claim 60, and the process of matching a transaction log with a data model as mentioned in the last clause of claim 60 must be shown or the features canceled from the claims. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Initially, it is noted that Applicant has not specifically pointed out where any of the new or amended claims are supported, nor does there appear to be a written description of the following claim limitations in the application as filed. On page 26, filed 2/5/07, Applicants suggest that the claim amendments and new claims "are supported by the instant specification and the provisional patent application." However, there is no guidance of specifically where such support can be found. Further, while certain claim limitations may draw support from the provisional patent application from which the instant specification finds priority (e.g., "state

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field” of claim 60), this does not diminish the requirement that the disclosure itself provide support for the subject matter of a claim (see MPEP 2163.01).

11. Claims 2-14, 28, 30-35, 39, 53, 54, 57, and 58 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Independent claims 39, 53, 54, 57, and 58 refer to an “interface library” or “interface libraries,” which do not appear to be supported by the originally filed specification. While the specification describes using interfaces to connect mobile users with enterprise systems (e.g., see page 9 lines 16-19), there is no disclosure regarding any type of interface *library* or *libraries* as required by the claims. Claims 2-14, 28, and 30-35 are rejected as being dependent upon a rejected base claim.

12. Claims 37, 38, and 59 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Independent claim 59 refers to “a series of element tags” in line 7. While the originally filed specification discloses “Fields 1304,” which describe classes, the specification is silent with regard to any “elements” or “tags.” Claims 37 and 38 are rejected as being dependent upon a rejected base claim.

13. Claims 2-14, 37, 38, 40-44, 53, 54, 59, and 60 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains

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subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Independent claim 40 refers to a “stand-alone data model data file” in line 4. Independent claims 53, 54, and 60 contain similar limitations such as “platform independent,” or “dedicated” data model data file. While referring throughout to a “data model,” no description is provided in the originally filed specification regarding any type of “stand-alone...file” Claims 2-14, 37, 38, and 41-44 are rejected as being dependent upon a rejected base claim.

14. Claim 60 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Claim 60 recites: “an enterprise application created in accordance with the requirements of the data model.” While the originally filed specification describes the creation of a data model by extending an enterprise application (see page 13 lines 10-12), creation of mobile computing applications using data models (see page 10 lines 8-10), and creation of server side applications using a data model in order to integrate with enterprise applications (see page 16 lines 16-19), there does not appear to be any description of an enterprise application that is created in accordance with the requirements of a data model.

Claim 60 recites: “an enterprise data store instantiated in accordance with the data model.” While the originally filed specification discloses instantiating a domain data store, a mobile data store using a mobile data model (see page 34 line 20 through page 35 line 2), and

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further describes a mobile data model *used with* an enterprise data store (see page 11 lines 18-19), there does not appear to be any description of an enterprise data store that is *instantiated from* a data model.

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claim 55 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. Claim 55 recites the limitation "the integration engine" in line 5. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation will be interpreted as --the integration unit--.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,636,873 to Carini et al. (hereinafter "Carini") in view of U.S. Patent 7,188,332 to Charisius et al. (hereinafter "Charisius"), in view of prior art of record "Principles of Object Oriented

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Analysis and Design” by Martin (hereinafter “Martin”) as applied to claim 57 below, and further in view of prior art of record prior art of record U.S. Patent 6,754,670 to Lindsay et al. (hereinafter “Lindsay”).

In regard to claim 28, the following rejection of claim 57 is incorporated. Carini, Charisius, and Martin do not expressly disclose: *wherein the data model describes a naming and directory interface that associates enterprise names and objects in a binding that allows access to an SQL database system*. However, in an analogous environment, Lindsay teaches that object data can be bound to access a SQL database. See column 2 lines 19-34. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Lindsay’s teaching of binding objects in a SQL database with Carini’s data model. One of ordinary skill would have been motivated to flexibly accommodate changes in a relational database (column 2 lines 9-13).

20. Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carini, Charisius, and Martin as applied to claim 58 below, and further in view of prior art of record U.S. Patent 5,604,906 to Murphy et al. (hereinafter “Murphy”).

In regard to claim 35, the above rejection of claim 58 is incorporated. Carini, Charisius, and Martin do not expressly disclose: *bundling the software platform with other software to create a bundled package*. However, in an analogous environment, Murphy teaches bundling software. See Abstract. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to bundle Carini's software with other software. One of ordinary skill would have been motivated to increase the chances of a consumer purchasing more software by bundling it with a distributed package.

21. Claims 19, 39, and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carini in view of Charisius in view of prior art of record U.S. Patent 5,960,200 to Eager et al. (hereinafter "Eager"), in view of Martin.

In regard to claim 19, the following rejection of claim 55 is incorporated. Carini further discloses: *data elements*. See column 6 lines 43-46. Carini, Charisius and Eager do not expressly disclose: *data relationships, data dependencies and data distribution attributes*. However, Martin teaches that data models provide relationships in object-oriented models including data elements, data relationships, and data dependencies. See pages 82 and 87. Martin further teaches data distribution attributes in terms of cardinality constraints. See page 83. Note that this interpretation of "distribution attributes" is based on the discussion of distribution properties found on page 34 lines 8-13 of the originally filed specification. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin's teaching of an object-oriented view of data Carini's data model in order to enable faster application development and easier application maintenance (see Martin bottom of page 307). All further limitations have been addressed in the above rejection of claim 39.

In regard to claim 39, Carini discloses:

*A method (see column 3 line 64 – column 4 line 14, e.g. “method”) comprising:
distributing a software platform to a first enterprise, the software platform for use
in connection with an enterprise computing system having a plurality of backend
software applications; See column 9 line 57 through column 10 line 10, e.g.
“applications.”*

*...the data model data file ... describing transactions between a mobile software
application and at least one backend software application... See column 6 lines 43-53,
e.g. “schemas including snapshots...may contain the latest data to be downloaded.”*

*instantiating a data store separate from the data model data file and based upon
the ... data model data file; and See Carini column 5 lines 25-30, e.g. “replication
database”; also see column 5 lines 49-51 and column 7 lines 55-65.*

*interfacing the mobile software application with the backend software application
using at least a portion of the data model data file, the mobile software application and
the backend software having access to the data model data file via an interface library
See Carini column 5 lines 35-38, e.g. “interface layer”; Also, see column 6 lines 43-46
which disclose “database schemas” which are used as data model data files. Further, see
column 3 lines 56-58 for a description of operation using a plurality of interfaces, broadly
interpreted as an interface library.*

Carini does not expressly disclose: *...distributing the software platform to a second enterprise, the software platform including a data modeling program allowing creation of a data model data file,...* However, Charisius teaches the distribution of a data modeling program for creating a data model data file. See column 23 lines 38-44, e.g. "software development tool...data definition file." It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Charisius' development tool with Carini's data file in order to save development time as suggested by Charisius (see column 24 lines 17-25).

Carini does not expressly disclose: *providing physical and logical views of data,* However, Eager teaches that relational data models provide several views of data and describes transactions. See column 20 lines 12-14:

The relational data model can be viewed at three different levels: conceptual, logical, and physical.

Also see column 20 lines 25-31:

In the relational model, a database schema consists of the description of the tables, their fields, and the fields formats and domains. **The relational algebra provides the theoretical basis for the model, with five operators:** selection, projection (deleting columns from table), product, union (adding the rows of two tables), difference and a composite: join.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Eager's relational data model with Carini's schema file in order to provide an implementation using technology that is well understood as suggested by Eager (see column 28 lines 25-28).

Carini does not expressly disclose: *defining connections between data classes that express relationships and dependency relationships and including embedded distribution attributes;* However, Martin teaches that data models provide relationships in object-

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oriented models including data elements, data relationships, and data dependencies. See page 82:

Object types have relationships with other object types.

Also see page 87:

As described earlier, object types can have more specialized types called *subtypes* and more general types called *supertypes*.

Martin further teaches data distribution attributes in terms of cardinality constraints. See page 83:

The term *cardinality constraint* refers to the restriction of how many of one item can be associated with another.

Note that this interpretation of “distribution attributes” is based on the discussion of distribution properties found on page 34 lines 8-13 of the originally filed specification. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin’s teaching of an object-oriented view of data with Eager’s physical and logical views of data to view Carini’s data model in order to enable faster application development and easier application maintenance (see Martin bottom of page 307).

In regard to claim 51, the following rejection of claim 45 is incorporated. Carini, and Charisius do not expressly disclose: *wherein the mobile data model defines a physical view of data, an object oriented view of data and a logical view of data.*

However, as discussed in the above rejection of claim 39, Eager teaches a data model having physical and logical views of data. Eager does not appear to expressly teach an *object oriented* view of data. However, Martin teaches that an object relationship

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diagram can be used to provide an object oriented view of data (See page 82 "Object-Relationship Diagrams"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin's teaching of an object-oriented view of data with Eager's physical and logical views of data to view Carini's data model in order to enable faster application development and easier application maintenance (see Martin bottom of page 307).

22. Claims 2-9, 12, 13, 37, 38, 40-44, 53, 54, and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carini in view of Charisius.

In regard to claim 40, Carini discloses:

A system integration method (see column 3 line 64 – column 4 line 14, e.g. "method") comprising:

integrating a first computing system into a first enterprise network, the first computing system including an integration unit operable to access a backend application of the first enterprise network, See Fig. 5, element 422 and supporting text in column 6 lines 46-53, e.g. "concentrator."

the integration unit further operable to access a first stand-alone data model data file associated with enterprise data to be shared between at least one of a plurality of backend applications and at least one of a plurality of mobile computing devices, See Fig. 5, element 420, also supporting text in column 6 lines 43-46, e.g. "schemas."

the stand-alone data model data file defining, ... parameters required for interfacing a mobile software application with at least one of the plurality of backend applications and wherein the stand-alone data model data file contains elements that are mobile computing device user dependent; and See Fig. 5 and supporting text in column 6 lines 42-53, e.g. "data from the enterprise database."

a connection unit responsive to a plurality of mobile computing devices, at least one of the plurality of mobile computing devices having access to the first stand alone data model data file. See Fig. 5. Note that each device connected to the network inherently contains a connection unit with access to the data file, otherwise the devices would not be able to use the snapshot information as described in column 6 lines 43-53.

Carini does not expressly disclose: *independent of a particular hardware or software platform.* However, Charisius teaches the use of a hardware and software independent data file. See column 23 lines 68-44, e.g. "XML." Note that XML is software/hardware independent. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Charisius' file format with Carini's data model in order to visualize definition of a data structure as suggested by Charisius (see column 24 lines 17-21).

In regard to claim 41, the above rejection of claim 40 is incorporated. Carini further discloses: *the integration unit adapted to read from and write to a backend application by accessing the stand-along data model data file.* See Fig. 5, element 420, also supporting text in column 6 lines 43-46.

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In regard to claim 42, the above rejection of claim 40 is incorporated. Carini further discloses: *routing information flow between the integration unit, a mobile computing device and a backend application in accordance with information maintained in the stand-alone data model data file.* See Fig. 4. and column 3 lines 64 – column 4 line 14.

In regard to claim 43, the above rejection of claim 40 is incorporated. All further limitations have been addressed in the following rejection of claim 53.

In regard to claim 44, the above rejection of claim 40 is incorporated. All further limitations have been addressed in the following rejection of claim 45.

In regard to claim 53, Carini discloses:

A method (see column 3 line 64 – column 4 line 14, e.g. “method”) comprising:

...

data model data file defining data elements, ... required for and actively employed in interfacing a mobile software application with at least one of the plurality of backend applications and See column 6 lines 43-46, e.g. “schemas.”

Carini does not expressly disclose: *data relationships, data dependencies and data distribution attributes* However, Martin teaches that data models provide relationships in object-oriented models including data elements, data relationships, and data dependencies. See page 82:

Object types have relationships with other object types.

Also see page 87:

As described earlier, object types can have more specialized types called *subtypes* and more general types called *supertypes*.

Martin further teaches data distribution attributes in terms of cardinality constraints. See page 83:

The term *cardinality constraint* refers to the restriction of how many of one item can be associated with another.

Note that this interpretation of “distribution attributes” is based on the discussion of distribution properties found on page 34 lines 8-13 of the originally filed specification. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Martin’s teaching of an object-oriented view of data with Eager’s physical and logical views of data to view Carini’s data model in order to enable faster application development and easier application maintenance (see Martin bottom of page 307).

creating at least one enterprise application operable to access the data model data file using one or more interface libraries, operation of the enterprise application instructed by the data elements, data relationships, data dependencies and data distribution attributes included in the data model data file; and See column 8 lines 31-37, e.g. “Web-based application.” Note that the creation of such an enterprise application is inherent, otherwise it would not exist.

creating at least one mobile software application for operation on the plurality of mobile computing devices, the mobile software application operable to access the data model data file using one or more interface libraries and to complete transactions with the enterprise application based on the data elements, data relationships, data dependencies and data distribution attributes included in the data model data file. See

column 7 lines 55-65, e.g. “application resident on the mobile devices.” Note that the creation of such a mobile application is inherent, otherwise it would not exist.

All further limitations have been addressed in the above rejection of claims 39, 40, and 45.

In regard to claim 54, all limitations have been addressed in the above rejection of claims 39 and 45.

In regard to claim 2, the above rejection of claim 54 is incorporated. All further limitations have been addressed in the above rejection of claim 40.

In regard to claim 3, the above rejection of claim 54 is incorporated. Carini further discloses: *wherein the software platform is distributed to the first enterprise using a first distribution mechanism and the software platform is distributed to the second enterprise using a second distribution mechanism.* See column 3 lines 56-63.

In regard to claim 4, the above rejection of claim 54 is incorporated. Carini does not expressly teach differing categorizations of industries among enterprises. However, as the word “enterprise” is used to describe a computing environment existing in a business organization or corporation, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Carini’s teachings among differing industries. One of ordinary skill would have been motivated to provide data model

representations to as many industries as possible in order to maximize potential profit from licensing and sales of software implementations.

In regard to claim 5, the above rejection of claim 54 is incorporated. Carini does not expressly disclose *receiving monetary value from the first and the second enterprises in connection with the distribution of the software platform*. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to collect payment for delivery of software. One of ordinary skill would have been motivated to make money for providing goods or services.

In regard to claim 6, the above rejection of claim 54 is incorporated. Carini does not expressly disclose: *wherein the software platform includes a development environment that allows creation of a software application that references the data model data.file*. However, Charisius teaches the use of a development environment. See Fig. 7, element 708.

In regard to claim 7, the above rejection of claim 54 is incorporated. All further limitations have been addressed in the above rejection of claim 40.

In regard to claim 8, the above rejection of claim 54 is incorporated. Carini further discloses: *wherein the software platform is integrated with a backend software application of the second enterprise*. See Fig. 4.

In regard to claim 9, the above rejection of claim 54 is incorporated. Carini further discloses: *using a mobile computing system to create a second software application, the second software application to control transfer of data with at least one of the plurality of backend applications of the enterprise computing system, wherein the*

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second software application references the data model. See Fig. 4, elements 406, 414, 408, etc. are examples of devices that use a second software application.

In regard to claim 12, the above rejection of claim 9 is incorporated. Carini further discloses: *wherein the mobile computing system uses a mobile domain.* See FIG. 4.

In regard to claim 13, the above rejection of claim 6 is incorporated. Wright further discloses: *the software application is a task specific software application that is targeted for use by a selected class of employees of an enterprise associated with the enterprise computing system.* See column 9 lines 48-50.

In regard to claim 59, Carini discloses:

A method (see column 3 line 64 – column 4 line 14, e.g. “method”) *comprising:*
creating a data model data file based at least in part on guidelines relating to extending usage of one or more enterprise applications and enterprise data into a mobile domain, See Charisius column 22 lines 49-52, e.g. “use-case and class diagrams.”

the data model data file including a series of element tags describing individual data classes and connections therebetween; See Charisius column 23 lines 49-51, e.g. “tags.”

and hosting the software platform on a server. See column 8 lines 31-37, e.g. “web-based application.”

All further limitations have been addressed in the above rejection of claims 39, 45, and 58.

In regard to claims 37 and 38, the above rejection of claim 59 is incorporated. All further limitations have been addressed in the above rejections of claims 5 and 45, respectively.

23. Claims 26, 30-34, 45-50, 52, 56-58, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carini, Charisius, and Martin.

In regard to claim 45, Carini discloses:

A method (see column 3 line 64 – column 4 line 14, e.g. “method”) *comprising:*
...the software platform further including a deployment feature allowing deployment of at least a portion of the mobile data model data file to a plurality of mobile computing devices See column 6 lines 54-61, e.g. “data is synchronized.” Note that the act of synchronization utilizes deployment by way of downloading as described by Carini.

All further limitations have been addressed in the above rejection of claim 39 by way of Charisius and Martin.

In regard to claim 46, the above rejection of claim 45 is incorporated. Carini further discloses: *wherein the one or more interested consumers includes a software instance deployed to one or more entities of a domain.* See column 6 lines 43-46.

In regard to claim 47, the above rejection of claim 46 is incorporated. Carini further discloses: *wherein the software instance includes an integration component operable to access, create, and update data instances in the domain directly while interfacing with one or more enterprise systems.* See column 7 lines 21-35.

In regard to claim 48, the above rejection of claim 45 is incorporated. Carini further discloses: *wherein the mobile data model is decoupled from a particular mobile software application and a particular backend application for which it provides an interface such that the mobile data model may be altered without affecting changes in either the decoupled mobile software application or the decoupled backend application.* See Fig. 5, element 420, also supporting text in column 6 lines 43-46, e.g. "schemas."

In regard to claim 49, the above rejection of claim 45 is incorporated. Carini further discloses: *wherein at least one of mobile software application interacts with the mobile data model when referencing enterprise data.* See column 7 line 65 – column 8 line 9.

In regard to claim 50, the above rejection of claim 45 is incorporated. Carini further discloses: *wherein the mobile data model may be accessed to allow at least one mobile software application and the backend application access to an enterprise data store.* See column 6 lines 42-53.

In regard to claim 52, the above rejection of claim 45 is incorporated. Carini further discloses: *building one or more software applications referencing the mobile data model using the distributed software platform*. See column 9 lines 57-60.

In regard to claim 56, Carini discloses:

A method of distributing a software platform (see column 3 line 64 – column 4 line 14, e.g. “method”). All further limitations have been addressed in the above rejection of claims 39 and 40.

In regard to claim 26, the above rejection of claim 56 is incorporated. All further limitations have been addressed in the above rejection of claim 45.

In regard to claim 57, Carini discloses:

A method (see column 3 line 64 – column 4 line 14, e.g. “method”). All further limitations have been addressed in the above rejection of claims 39, 40, and 45.

In regard to claim 58, Carini discloses:

A method (see column 3 line 64 – column 4 line 14, e.g. “method”) *comprising:*

identifying a provider of a software platform; receiving the software platform....;

Identification of a provider and reception of a software platform is inherent in installation of the system. Without identification, a platform could not be received, and without reception, the platform simply could not be installed.

reference a data model in the data model data file when recording transactions to be synchronized with the enterprise application See column 6 lines 63-66, e.g.

“synchronization log.” All further limitations have been addressed in the above rejection of claims 39 and 45.

In regard to claim 30, the above rejection of claim 58 is incorporated. Carini does not expressly disclose licensing software. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to license the software. One of ordinary skill would have been motivated to provide a conditional right to use software in exchange for compensation.

In regard to claim 31, the above rejection of claim 58 is incorporated. Carini does not expressly disclose: *distributing the software platform to another party*. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to send Carini’s platform to a third party. One of ordinary skill would have been motivated to exchange software for monetary compensation.

In regard to claim 32, the above rejection of claim 58 is incorporated. Carini further discloses: *using the software platform*. See column 10 line 1.

In regard to claim 33, the above rejection of claim 58 is incorporated. Carini does not expressly disclose: *making copies of the software platform*. However, copies would be inherent in the distribution to a second enterprise as discussed in the above rejection of claim 1, otherwise the only platform would have been sent to the first enterprise and would be unavailable.

In regard to claim 34, the above rejection of claim 58 is incorporated. Carini does not expressly disclose: *securing the right to distribute the software platform*. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain a copyright for software. One of ordinary skill would have been motivated to obtain the legal right for distribution of software in order to maximize potential profit of sales.

In regard to claim 60, Carini discloses:

A method (see column 3 line 64 – column 4 line 14, e.g. “method”) *comprising:*

...a data model describing requirements for extending the use of one or more backend application systems to one or more mobile devices in a mobile domain, See column 5 lines 25-30 and column 6 lines 43-46, e.g. “subset image of the enterprise database.”

a state field to indicate whether the data model may be freely modified, modified with permission or is in use See column 8 lines 60-63, e.g. “rules.” Note that the alternative “or” permits Carini’s rules to read on the limitation.

and wherein at least a portion of the dedicated data file is deployed to one or more enterprise and mobile computing systems; See column 6 lines 46-61, e.g. “snapshots.”

an enterprise application created in accordance with the requirements of the data model, See column 8 lines 31-37, e.g. “Web-based application.” Note that the creation of such an enterprise application is in accordance with the requirements of the data model since it supplies data to the replication database.

a mobile software application created in accordance with the requirements of the data model, See column 7 lines 55-65, e.g. “application resident on the mobile devices.” Note that the creation of such a mobile application is in accordance with the requirements of the data model since it uses the data retrieved from database.

the mobile software application separate from the dedicated data file and the enterprise application, See Carini column 5 lines 25-30, e.g. “replication database”; also see column 5 lines 49-51 and column 7 lines 55-65.

the enterprise data store resident on the enterprise system separate from the dedicated data file; See FIG. 4 elements 404, 402, and 420, e.g. “enterprise database.”

a mobile data store instantiated in accordance with the data model of the dedicated data file, the mobile data store resident on the mobile computing device and

separate from a portion of the dedicated data file resident on the mobile computing system; and See Fig. 3, element S4, e.g. "data on laptop."

the mobile software application operable to reference at least one data model in a transaction log recording transactions performed at the mobile computing device during at least those periods when the mobile computing device is not communicatively coupled to the enterprise application system, the enterprise application operable to receive the transaction log, load a data model associated with a current data store, identify the data model referenced in the transaction log, See column 6 lines 63-66, e.g. "synchronization log."

compare the data model of the transaction log to that of the current data store, if matching, process the transactions recorded in the transaction log, if not matching, load a data model corresponding to that recorded in the transaction log and process the transactions recorded in the transaction log in accordance with the loaded data model; and See column 8 lines 50-53, e.g. "the data that is returned may be transformed."

hosting the software platform. See column 8 lines 31-37, e.g. "web-based application."

All further limitations have been addressed in the above rejection of claims 39 and 58.

24. Claims 10, 11, 14, 16-18, 20-24, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carini, Charisius and Eager.

In regard to claim 10, the above rejection of claim 9 is incorporated. Carini and Charisius do not expressly disclose: *deploying the second software application onto a mobile application server, the mobile application server responsive to the enterprise computing system and responsive to the plurality of mobile computing devices*. However, Eager discloses the use of application servers for distribution of application software. See column 1 lines 49-63. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Eager's application server with Carini's software in order to maximize usage of computer resources as suggested by Eager.

In regard to claim 11, the above rejection of claim 10 is incorporated. Carini further discloses: *wherein data is transferred asynchronously between the first software application and the second software application*. See column 6 lines 54-61 in view of column 2 lines 63-67, e.g. "asynchronously synchronize."

In regard to claim 14, the above rejection of claim 13 is incorporated. Carini further discloses: *wherein an employee using one of the mobile computing devices ... so that such employee is given access to the first software application*. See column 9 line 43 – column 10 line 10. Carini and Charisius do not expressly disclose: *provides information so that the employee is authenticated as belonging to the selected class* However, Eager teaches that authentication can be used to identify a user. See column 13 lines 47-49. It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to use Eager's authentication with Carini's employee access in order to provide custom functionality as suggested by Eager (see column 13 lines 38-41).

In regard to claim 55, Carini discloses:

A system integration method (see column 3 line 64 – column 4 line 14, e.g. “method”) *comprising: integrating a second computing system to a second enterprise.*

See Fig. 4. a plurality of devices are connected to a network that is further connected to a consolidator 422, broadly interpreted as providing a plurality of enterprises.

All further limitations have been addressed in the above rejection of claims 39 and 40.

In regard to claim 16, the above rejection of claim 55 is incorporated. Carini further discloses *further comprising providing integration services in connection with integrating the first computing system into the first enterprise network.* See column 6 lines 54-63.

In regard to claims 17 and 18, the above rejection of claim 55 is incorporated. All further limitations have been addressed in the above rejection of claim 5.

In regard to claim 20, the above rejection of claim 55 is incorporated. Carini further discloses: *a data management module in communication with the integration unit and with the connection unit.* See FIG. 4 element 418.

In regard to claim 21, the above rejection of claim 55 is incorporated. All further limitations have been addressed in the above rejection of claim 11.

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In regard to claim 22, the above rejection of claim 55 is incorporated. Carini further discloses: *integration transaction data is transmitted between the data management module and the integration unit.* See Fig. 2 elements 418 and 422.

In regard to claim 23, the above rejection of claim 22 is incorporated. Carini further discloses: *integration transaction data is transmitted between the integration unit and the back-end application.* See Fig. 2, elements 422 and 404.

In regard to claim 24, the above rejection of claim 22 is incorporated. Carini further discloses: *the back-end application is selected from the group consisting of an accounting program, a database program, an enterprise resource management program, and a customer relationship management program.* See column 9 lines 57-67.

Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER